

**Environmental Cooperative Agreement
between
Wisconsin Electric Power Company
and
Wisconsin Department of Natural Resources**

This agreement is being entered into, pursuant to sec. 299.80 Wisconsin Statutes and represents the conditions negotiated and agreed upon by Wisconsin Department of Natural Resources (WDNR) and Wisconsin Electric Power Company (the Company, doing business as We Energies), for the purpose of providing an alternative method for the regulation of environmental impacts from Wisconsin Electric Power Company's Pleasant Prairie Power Plant.

Comment [s1]: Changes in the Preamble reflect the fact that the company name has changed since the original agreement, and that this Agreement is a renewal of the original Agreement.

This Agreement is a renewal of the Environmental Cooperative Agreement that was initially entered into by the parties on February 5, 2001 for an additional five years in accordance with the enabling legislation.

FOR AND IN CONSIDERATION of the terms and conditions contained in this agreement, WDNR and the Company set forth the following:

I. FACILITY INFORMATION:

Pleasant Prairie Power Plant
8000 95th Street
Pleasant Prairie, WI 53158

Comment [s2]: Section I changes include updates to plant contact information, updates to the plant description because of recent construction, and correction of two errors in the original: the original called Pleasant Prairie a Town and had an erroneous value for the plant's capacity.

Plant Management Contact:

Mr. Patrick Stiff, Asset Manager
(414) 947-5322
(414) 947-5608 fax

Deleted: Stephen "Steve" Downs, Plant

Deleted: 5321

Pat.Stiff@we-energies.com

Deleted: Steve.Downs@wepco

Web Page: www.we-energies.com

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The Pleasant Prairie Power Plant is the largest electric generating plant in Wisconsin. The facility occupies approximately 425 acres of land in the Village of Pleasant Prairie, five miles west of Lake Michigan in Kenosha County. The plant consists of two nominally rated 615 MW units, each consisting of a boiler, turbine and electric generator. It is Wisconsin Electric's main baseload plant, operating 24 hours per day throughout the year with the exception of maintenance outages that are typically scheduled once every 12 to 24 months.

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The plant burns low-sulfur pulverized coal delivered to the plant from the Powder River Basin in Wyoming via unit trains. At maximum load the plant may burn 800 tons of coal per hour. Coal delivered to the plant is stored in an outdoor coal pile having a maximum capacity of 1.4 million tons. The plant also uses natural gas and No. 2 fuel oil during initial start-up of the boilers when they have been out of service and as a supplemental fuel.

Exhaust gases from the boilers are routed through electrostatic precipitators that remove more than 99.79 percent of the fly ash. Heavier bottom ash is collected at the base of the boiler with a separate ash system. All ash generated by the plant is used commercially. After passing through the air pollution control systems, the exhaust gases are routed to a common 450-foot chimney.

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Emissions to the air include nitrogen oxides, particulate matter, sulfur dioxide, carbon monoxide, and volatile organic compounds. The Company is making significant investments in air pollution control system upgrades to reduce emissions of nitrogen oxides, sulfur dioxide, and particulate matter. An initial \$80 million investment occurred in 2002 with the installation of a Selective Catalytic Reactor (SCR) in Unit 2. This SCR reduced nitrogen oxides (NOx) emissions from Unit 2 by approximately 85-90 percent. Beginning in 2004, a \$325 million project was initiated to install a second SCR on Unit 1, and construct two flue gas desulfurization (FGD) (or scrubber) units to reduce sulfur dioxide emissions. When completed, the FGDs will reduce sulfur dioxide emissions by 90-95 percent. To accommodate the additional air pollution control systems, a new 450-foot tall chimney structure has also been constructed east of the existing chimney. The existing chimney will be removed in 2008. The entire pollution control project will be completed by the end of 2007. Pleasant Prairie Power Plant is the first power plant in Wisconsin to install SCR and FGD systems.

Exhaust steam from the turbines is routed through cooling condensers before being re-injected into the boiler. To get rid of this unrecoverable heat, a maximum of 400,000 gallons of water per minute are pumped through each of the two circular cooling towers located north of the plant. Each of these mechanical draft towers is 300 feet in diameter and 75 feet tall, and contains tens of thousands of small deflectors that break up the water into very fine droplets that dissipate unrecoverable heat to the atmosphere. The most obvious reminder of the plant's presence (especially on a cold day) is the water vapor plume rising from the cooling towers. Makeup water for the evaporation losses is pumped from Lake Michigan at the rate of 3,000-4,000 gallons per minute for each cooling tower.

About 3.75 million gallons per day of wastewater, primarily cooling tower blowdown water, is discharged into Lake Michigan through a five-mile pipeline. The circulating cooling water system releases water (blowdown) to prevent the buildup of dissolved solids, and adds new lake water (make-up) to compensate for the blowdown and evaporative losses. Combined with the cooling tower blowdown are other wastewater sources consisting of low volume wastewater, coal pile runoff, and metal cleaning wastewater. These three wastewater sources are stored in separate retention basins and are then routed to the wastewater treatment system for solids and metals removal. In addition, there is an outfall for a deicing line for the water intake system, and an infrequently used overflow outfall for the coal pile runoff retention basin, which discharges to Jerome Creek.

II. DEFINITIONS. The following definitions are applicable to this agreement:

- a. "Approval" means a permit, license or other approval issued by the department under chapters 280 to 295 Wis. Stats.
- b. "Cooperative agreement" means an agreement entered into under section 299.80(6), Wis. Stats.
- c. "Environmental management system" means an organized set of procedures implemented by the owner or operator of a facility to evaluate the environmental performance of the facility and to achieve measurable or noticeable improvements in that environmental performance through planning and changes in the facility's operations.
- d. "Environmental performance" means the effects whether regulated under chapters 280 to 295 Wis. Stats. or unregulated, of a facility on air, water, land, natural resources and human health.
- e. "Facility" means all buildings, equipment and structures located on a single parcel or on adjacent parcels that are owned or operated by the same person.
- f. "Interested person" means a person who is or may be affected by the activities at a facility that is covered or proposed to be covered by a cooperative agreement or a representative of such a person.
- g. "Performance evaluation" means a systematic, documented and objective review conducted by or on behalf of the owner or operator of the facility, of the environmental performance of the facility, including an evaluation of compliance with the cooperative agreement covering the facility, approvals that are not

Comment [s3]: Section II of the original Agreement included an incomplete definition of performance evaluation that has been corrected in this version.

replaced by the cooperative agreement and the provision of chapters 280 to 295 Wis. Stats. and rules promulgated under those chapters for which a variance is not granted.

h. "Pollutant" means any of the following: any dredged spoil, solid waste, incinerator residue, sewage, garbage, refuse, oil, sewage sludge, munitions, chemical wastes, biological materials, radioactive substance, heat, wrecked or discarded equipment, rock, sand, cellar dirt, or industrial, municipal, or agricultural waste discharged into water or onto land, any dust, fumes, mist, liquid, smoke, other particulate matter, vapor, gas, odorous substance or any combination of those things emitted into the air but not uncombined water vapor.

i. "Violation" means a violation of a cooperative agreement, of an approval that is not replaced by the cooperative agreement or of a provision of chapters 280 to 295 Wis. Stats. and rules promulgated under those chapters for which a participant has not received a variance.

III. PERIOD OF AGREEMENT. This agreement is a renewal of the original agreement for this site that was signed on February 5, 2001. This extended agreement shall commence upon its signing by both parties and continue until February 4, 2011, during which period the Company and WDNR shall abide by all terms and conditions contained herein.

Comment [s4]: Section III changed to reflect the renewal and 5-year extension of the Agreement.

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IV. AMENDMENT/REVOCATION. Pursuant to s. 299.80(7), Wis. Stats., WDNR may amend this agreement with the consent of the Company or for cause. WDNR may revoke an agreement at the request of the Company or if the Company is in substantial noncompliance, refuses to amend this agreement, is unable or unwilling to meet commitments to superior environmental performance or have not addressed a substantive issue raised by a majority of the interested persons (s. 299.80 (7), Wis. Stats). WDNR shall provide at least 30 days for public comment on the proposed amendment or revocation of a cooperative agreement and an opportunity for a hearing if comments demonstrate considerable public interest in the proposed action.

V. ENTIRE AGREEMENT. This agreement, together with any specifications, referenced parts, attachments and effective amendments, shall constitute the entire agreement. Communications or understandings made prior to the signing of this agreement and pertaining to its subject matter are hereby superseded. All revisions to this agreement must be made by a written amendment to this agreement, signed by both parties and issued under the same procedures as this agreement.

VI. APPROVALS COVERED.

The following permits and approvals covered by this agreement apply specifically to the Pleasant Prairie Power Plant:

Air Quality Permit (Title V Permit)	Air Pollution Control Operation Permit (Title V) WDNR Permit No. 230006260- <u>P02</u> EI Facility No. 230006260
Wastewater Permit	Wisconsin Pollutant Discharge Elimination System Permit (WPDES) Wisconsin Permit No. WI-0043583- <u>06</u>

Comment [s5]: Section VI is substantially modified. The air and water permit numbers are updated, and the existence of an additional approval relevant to this site (the Multi-Emission Cooperative Agreement) is acknowledged. More importantly, the amendment will modify two key approvals concerning ash recovery and use:

- 1) Expand the options for recovery to include "early coal ash disposal areas" not listed in the original Agreement.
- 2) More clearly distinguish between the approved uses for ash recovered from licensed landfills, including the one on site, versus the more limited approval for ash recovered from unlicensed landfills.

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Stormwater Permit	Wisconsin Stormwater Permit Wisconsin Permit No. WI-0043583-3
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Deleted: Solid Waste Permit (Ash
Landfill) [1]

The following approvals covered by this agreement apply to solid waste facilities owned by the Company from which stored combustion waste materials may be removed for energy recovery at Pleasant Prairie Power Plant or beneficial use in accordance with ch. NR 538, Wis. Adm. Code:

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<u>Licensed Solid Waste Landfills</u>	<u>Pleasant Prairie Ash Landfill</u> <u>WDNR Site License #02786</u> <u>8000 95th Street</u> <u>Pleasant Prairie, WI 53158</u> Caledonia Ash Landfill WDNR Site License #03232 4801 E. Elm Road Oak Creek, WI. 53154 North Oak Creek Landfill WDNR Site License #00349 Federal ID Number 241219440 4801 E. Elm Road Oak Creek, WI. 53154 South Oak Creek Landfill WDNR Site License #02357 4801 E. Elm Road Oak Creek, WI. 53154 System Control Center Ash Landfill WDNR Site License #02887 N20 W23501 Ridgeview Parkway Pewaukee, WI 53072 Highway 32 Ash Landfill WDNR Site License #02801 1866 N. Port Washington Rd. Grafton, WI 53024 Cedar-Sauk Landfill WDNR Site License #00603 Federal ID Number 246049210 Cedar-Sauk Road Town of Cedarburg 1.5 miles west of Saukville Highway 59 Landfill WDNR Site License #00918 Federal ID Number 268153160 Along Arcadian Avenue, east of Hwy. 164/59
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Deleted: Solid Waste Permit (landfill)

Town of Waukesha

In addition to the licensed facilities listed above, stored combustion waste materials from the Company's unlicensed Kansas Avenue Landfill (in St. Francis, Milwaukee County) and other early coal ash disposal areas that predate landfill licensing requirements may also be removed for energy recovery at Pleasant Prairie Power Plant.

The Company previously obtained approval from WDNR to burn a combination of pulverized coal, fly ash, and bottom ash at Pleasant Prairie Power Plant. This Agreement allows the Company to continue to burn a combination of pulverized coal, fly ash, and bottom ash at Pleasant Prairie Power Plant from the sources listed, plus other coal combustion sources. These other coal combustion sources may include previously deposited coal and ash deposits that may be on lands both owned and not owned by the Company. Combustion of coal combustion material sources shall occur in a manner that maintains continued compliance with the air quality and wastewater permits issued to the plant. Removal of these deposits and recovery for energy provides a benefit to the environment and local economic development.

Deleted: The proposal met WDNR's Air Management program requirements for use of alternate fuels, as well as WDNR's Waste Management program requirements for beneficial reuse of high-volume industrial wastes. That approval applies only

Deleted: ashes that have never been landfilled that were produced at three specific power plants owned by the Company (Valley Power Plant, Milwaukee County Power Plant

Deleted: Port Washington Power Plant). As such, that approval is

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The Company conducted an approved pilot project in 1998 that successfully demonstrated a process for recovering ash from the landfill at Pleasant Prairie Power Plant and processing the materials for beneficial use in construction materials while protecting the environment. The Company also has ongoing approval to beneficially use the fly ash and bottom ash generated at Pleasant Prairie Power Plant for specific purposes. That approval is not modified by this agreement.

Any requirements of the permits and approvals listed above that are superseded by this Cooperative Agreement are specified in Section XII (Operational Flexibility and Variances). All other requirements of the covered permits and approvals are unchanged by this Agreement. The Multi-Emission Cooperative Agreement signed by WDNR and the Company on September 30, 2002 shall also remain unchanged as it applies to Pleasant Prairie Power Plant.

VII. PROJECT MANAGEMENT

WDNR and the Company shall each assign a qualified Project Manager for the duration of this Agreement. The Project Managers shall be familiar with the history and contents of the Agreement, and it shall be their responsibility to oversee and coordinate the necessary actions as contained in the Agreement. The Project Managers shall facilitate communications between the parties to this agreement and serve as the primary contacts for all related inquiries.

The Project Managers shall seek to increase trust among the WDNR, the Company and the public. Additionally, the Project Managers shall also solicit the opinions of employees, WDNR staff and interested stakeholders regarding the success of the agreement.

Comment [s6]: Section VII includes three changes:

- 1) Eliminates the misleading impression that the Project Managers will use surveys or other quantitative methods to "measure" opinions.
- 2) Establishes a new team of DNR experts to improve communications with the Company and work more closely on compliance and performance issues.
- 3) Commits the project managers to conduct an evaluation of the feasibility of a more integrated approach (e.g., across air, water, waste issues) to environmental regulation, without committing either party to act on the results of the study.

Deleted: They shall also measure the opinions of employees

Deleted: regarding participation in this program, and seek to increase trust among WDNR, the Company, and

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WDNR shall assign within 30 days after signing of this agreement a multi-discipline regulatory and compliance assistance team to the Agreement that is knowledgeable about Pleasant Prairie Power Plant operations and the utility industry. This team shall have an intimate knowledge of the plant's operations and a working knowledge of the utility industry and utility operations that can affect the environment. The team shall also have working knowledge of non-environmental regulatory matters that affect the utility industry and may impact environmental commitments in this agreement. Members of the team shall include, but not be limited to, WDNR Sturtevant air, waste, remediation and redevelopment, and water quality staff, and similar staff from the Company's Environmental Department and the Pleasant

Prairie Power Plant Environmental Coordinator. The Company shall assist WDNR team members in gaining any site-specific or company-specific understanding that is required for this role. The WDNR team shall provide technical assistance to the Company in pollution prevention, waste minimization, and general environmental compliance best practices. WDNR team members and the Pleasant Prairie Power Plant team shall have a goal of meeting quarterly to share relevant information via formal and informal communications. The goal is to foster ongoing collaboration between WDNR and the Company, seeking to increase trust among government and the Company through open communication and support of early and credible resolution of issues concerning the environment and environmental regulation. The team shall review and track progress in meeting the goals and objectives of both this Agreement and other environmental aspects and potential impacts of the plant related to air, land and water quality, waste management, and other regulatory activities not covered by this Agreement.

The project managers shall perform an evaluation of the applicability and practicability of integrated permitting for the plant, and shall prepare a joint feasibility report by April 1, 2008 and an update by April 1, 2009. This evaluation, and subsequent reports, shall address the feasibility and efficacy of: 1) existing permits and compliance programs; 2) joint inspections; 3) integrated, risk-based approaches not feasible under the current regulatory system; 4) institutional, attitudinal, and regulatory barriers; and, 5) costs and benefits. Both WDNR and Company representatives will be included in this effort.

VIII. INTERESTED PERSONS GROUP

The Company shall maintain relations with an interested persons group that includes residents of the area, employees, and local officials. The members of this group may change over time without necessitating an amendment to this Agreement. The Company shall keep a current list of group members and update WDNR annually on any changes to the list in the performance reports described in Section XIV of this Agreement.

The Company shall meet with members of the interested persons group at least once every six months to discuss implementation of the plant's environmental management system (EMS), the progress of this Agreement, and the plant's environmental performance. The Company shall solicit comments on these subjects and seek consensus on any issues concerning performance.

Assistance available from the Company to help interested persons understand the implementation of this Agreement shall include but not be limited to the following:

Informational Meetings	<ul style="list-style-type: none"> Internal informational meetings for members of Local 2150 and 317, and plant management staff Invited informational meetings for external members of the interested persons group
Tours and Open Houses	<ul style="list-style-type: none"> Open house for employees of Local 2150 and 317 and plant management staff Targeted tours for external members of the interested persons group
Mailings	<ul style="list-style-type: none"> Summary information sheets outlining key information about the plant's operations, environmental performance, and key components of the Cooperative Agreement, including the plant's progress on specific commitments and activities

Comment [s7]: Section VIII has been overhauled. The original Agreement included commitments by the Company that went beyond statutory requirements, went beyond the commitments made by some other program participants, and ultimately proved unmanageable. This modified version is more realistic, and satisfies all statutory requirements for involving interested persons while giving the Company much greater flexibility on how to manage its public affairs. Minor editorial and clarifying changes have also been made to this section.

Deleted: Interested persons that the Company either has worked with or will be requesting to work with include representatives of the groups listed below. The individuals representing these groups may change over time without necessitating an amendment to this Agreement. The Company shall simply maintain a current list of individual participants. The Company shall also update WDNR annually on any changes to the list of participants in the written performance reports described in Section XIV of this Agreement.¶

¶
 <#>Pleasant Prairie Power Plant management staff¶
 <#>Local 2150 IBEW (plant represented staff)¶
 <#>Local 317 Operating Engineers (plant represented staff)¶
 <#>Village of Pleasant Prairie¶
 <#>Pleasant Prairie Planning Commission¶
 <#>Kenosha County¶
 <#>Office of the County Executive¶
 <#>Kenosha County Board of Supervisors¶
 <#>Environmental Health Office¶
 <#>Wisconsin Department of Natural Resources¶
 <#>Sturtevant Service Center¶
 <#>Milwaukee Regional Office¶
 <#>Kenosha Chamber of Commerce¶
 <#>Kenosha Area Development Corporation¶
 <#>Local Emergency Planning Committee (LEPC)¶
 <#>Kenosha News (local newspaper)¶
 <#>Wisconsin Environmental Initiative¶
 <#>Anthony Earl (former Governor)¶
 <#>Indian Trails School (local school)¶
 <#>Lakeshore Technical School (local school)¶

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	within the agreement.
We Energies Internet Site	<ul style="list-style-type: none"> • Maintenance of a specific page on the Company's Internet site dedicated to the Pleasant Prairie Power Plant and the Cooperative Agreement • Linkage of the Company Internet site with the WDNR Cooperative Agreement Internet site
Presentations and Visits	<ul style="list-style-type: none"> • Actively soliciting and responding to invitations from external groups for presentations by plant staff on the plant's operations, environmental performance, and progress on the agreement
Summaries to WDNR	<ul style="list-style-type: none"> • Annual summaries to WDNR's Regional and Service Center offices on the implementation progress of: a) environmental commitments to superior environmental performance; and b) operational flexibility and variances • Annual summaries (contained in the annual performance report) to WDNR on the Company's overall progress on implementation of the Cooperative Agreement and environmental performance

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 The Company shall meet with the interested persons group on a schedule of at least once every six months. The Company shall provide information, solicit comments, involve the interested persons group in reviewing performance under this agreement, and seek consensus over performance issues. The Company shall also provide opportunities for the interested persons group to comment on the Company's environmental management system and its implementation. Other types of information to be addressed in these meetings may vary, but shall include one or more of the following within each update:¶

¶
 <#>Progress on the negotiation and implementation of the Cooperative Agreement¶
 <#>Detailed reports on any specific commitments or flexibility aspects of the Cooperative Agreement, including opportunities and challenges¶
 <#>Baseline environmental performance of the plant¶
 <#>Significant findings from audits and resulting corrective actions ¶
 <#>Normalized emissions of the plant¶
 <#>Proposed changes in plant operation to increase energy efficiency and/or environmental performance¶
 <#>Administrative savings potentially realized by the Company and regulatory agencies.¶

IX. COMMITMENT TO ENVIRONMENTAL MANAGEMENT SYSTEM.

The Company commits to [maintain](#) an environmental management system (EMS) meeting the requirements of ISO 14001:2004. A certified ISO 14000 auditor shall oversee maintenance of this EMS.

X. COMMITMENT TO SUPERIOR ENVIRONMENTAL PERFORMANCE.

The Company commits to going beyond what would otherwise be required in environmental regulations by setting the following goals. Several of the goals include ambitious numerical targets. Performance falling short of any numerical target given below shall not be construed by WDNR as a violation of the agreement, and shall not by itself be considered grounds for amending or revoking the agreement.

Reduced Natural Resource Usage	<p>The Company shall combine ash recovered from landfills and other ash sources with coal and burn the mixture to generate electricity. One target is to reduce coal usage by 10,000 ton/yr. A second target is to generate 10,000 MWh/yr of electricity from recovered ash.</p> <p>Measure: Tons of coal displaced by recovered ash; Megawatt-hours (MWh) of energy recovered from previously landfilled ash.</p>
Reduced Waste Generation	The Company commits to an average annual opacity target of 10 percent during the first year of the agreement,

Comment [s8]: Section IX has been updated because the EMS is now fully operational, and the ISO standard was updated in 2004.

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Comment [s9]: Section X includes multiple changes to the commitments made in the original Agreement. Some of the original commitments were fully achieved in the first 5-year term, so they have been deleted from this version. Other commitments have been slightly modified to be consistent with other changes in this version. Most importantly, the final 3 rows in this table descri... [3]

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	<p>excluding periods of start-up, shutdown, and malfunction. The existing permit limitation is 20 percent <u>instantaneous limit</u>, except for periods of start-up, shutdown, and malfunction, as provided in 40 CFR 60.11(c).</p> <p>Measure: Opacity as read by continuous emission monitors using standard methods.</p>	
Improved Land Use and Reduced Risk of Environmental Contamination	<p>The Company shall remove ash from Company-owned landfills for beneficial <u>use</u>. An eventual goal is to completely remove the ash from one or more landfills and restore the land for more desirable uses. A second goal is to reduce risk and potential liability for groundwater contamination caused by leaching or leaking of materials from the landfills.</p> <p>Measure: Volume of landfill space made available; number of landfills decommissioned or acres of land made available for higher use.</p>	Deleted: reuse.
Implementation of ISO 14001-based Environmental Management System (EMS)	<p>The Company shall <u>maintain</u> a plant-wide EMS at Pleasant Prairie Power Plant based on ISO 14001:2004. This documentation shall be available to WDNR and the interested persons group.</p> <p>Measure: <u>Continual improvement of plant environmental systems.</u></p>	Deleted: implement and document
Environmental Management Information System (EMIS) Implementation	<p>The Company shall <u>maintain</u> a plant-wide electronic environmental management information system to assist plant and corporate staff in planning, tracking, and reporting on environmental activities and performance.</p> <p>Measure: <u>Maintenance of the system.</u></p>	<p>Deleted: Measure: Percent implementation</p> <p>Deleted: Baseline Performance Review (Audit)</p> <p>Deleted: The Company shall perform a baseline environmental performance review (audit) and annual reviews thereafter for the duration of the agreement. Key findings and follow up actions shall be communicated to the interested persons group.¶</p> <p>¶ Measure: Number of findings, corrective actions, and time periods required for corrective action.¶</p>
Supplier Environmental Management System Audits	<p>The Company shall conduct environmental management system (EMS) audits of all key suppliers that may present significant environmental aspects as part of the service they provide the plant, including but not limited to any business contracted to recover or process ash from a Company landfill. <u>ISO 14001:2004</u> shall be used as the protocol for these audits. Feedback shall be provided back to the suppliers.</p> <p>Measure: <u>Qualitative and quantitative performance measures specific to the Company's contract with each supplier.</u></p>	<p>Deleted: implement</p> <p>Deleted: Percent implementation</p> <p>Deleted: The Company shall notify WDNR and the interested persons group on the status and implementation of these audits during periodic meetings.</p> <p>Deleted: The suppliers audited shall be reported to the interested persons group; however, the specific results may remain confidential between the Company and the supplier.</p> <p>Deleted: List of audits conducted and q</p>
<u>Mercury Monitoring System Installation and Evaluation</u>	<u>The company will install a mercury continuous emission monitoring (Hg CEM) system on the common stack 1 by</u>	<p>Comment [s10]: NEW COMMITMENT TO SUPERIOR ENVIRONMENTAL PERFORMANCE</p>

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	<p>April 1, 2006. The purpose of installing Hg CEMs is to study and evaluate: 1) the current performance capabilities of state-of-the-art Hg CEMs as available to the commercial market; and, 2) to understand and learn the emission characteristics (range of variability, rate of variability or change) of mercury emissions from the boilers at Pleasant Prairie Power Plant. Such information may prove to be valuable in evaluating the effectiveness and compatibility of various mercury reduction technologies for possible installation and operation in response to future mercury reduction initiatives.</p>
<u>Mercury Removal System Evaluation</u>	<p>A study to evaluate the long term capability of a prototype mercury oxidizing selective catalytic reactor (SCR) catalyst is being undertaken at Pleasant Prairie Power Plant. We Energies is working in conjunction with a major air quality control manufacturer to test under actual field conditions an experimental mercury oxidizing catalyst that has worked successfully under laboratory conditions. A small pilot scale test vessel has been installed in parallel with the existing Pleasant Prairie Power Plant Unit 2 SCR system, in what is called a slip stream reactor configuration. The prototype catalyst will receive ammoniated flue gas from the full scale SCR system and the expected nitrogen oxide (NOx) reduction will occur. Due to a proprietary conditioning of the catalyst material, a corresponding oxidation of elemental mercury present in the flue gas will occur. Results of this test are important, as oxidized mercury can be collected in a downstream Flue Gas Desulfurization (FGD) system, while elemental mercury cannot be collected. FGD systems are being installed on both units at Pleasant Prairie Power Plant to reduce sulfur dioxide emissions. Approximately ninety percent of the mercury in the flue gas at Pleasant Prairie Power Plant is in an elemental state. A mercury oxidizing catalyst could prove to be a viable alternative to installing a carbon sorbent injection type of mercury removal system that would include an ash and carbon sorbent collection bag house.</p>
<u>Particulate Monitoring Evaluation</u>	<p>The Company shall perform a study examining the use of opacity and particulate matter monitors once the first FGD is operational. This study will be performed in 2007 and: 1) evaluate and determine the value of continued opacity measurement and reporting; 2) the efficacy of using PM monitors to measure particulate matter removal; and, 3) a proposed schedule for any change in monitoring and reporting protocol. The WDNR shall coordinate with the Company in this evaluation. A joint report shall be completed by December 31, 2007.</p>

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Comment [s11]: NEW COMMITMENT TO SUPERIOR ENVIRONMENTAL PERFORMANCE

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Deleted: The Company shall contribute to research and conduct field-testing at Pleasant Prairie Power Plant to characterize mercury emissions and to evaluate the performance of mercury control technologies for coal-burning power plants.¶

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Comment [s12]: NEW COMMITMENT TO SUPERIOR ENVIRONMENTAL PERFORMANCE

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¶ Measure: Percent complete and results of

Background

Currently the plant operates a continuous opacity monitor (COM), as an indicator of visible emissions, on the stack common to both units. The amount of light attenuated, blocked or deflected is assumed to be related to the amount of particulate matter present in the flue gas stream. Normally, the flue gas stream is relatively dry. Testing has demonstrated that the electrostatic precipitator normally removes 99.8 percent of the particulate matter present in the flue gas stream.

By December, 2007, Pleasant Prairie Power Plant will be operating wet flue gas desulfurization (FGD) systems on each of the units at the plant. This process creates a flue gas stream with a very high percentage of water droplets, with the moisture content at nearly saturation. The presence of water droplets can influence the amount of light attenuated, and affect the effectiveness of an opacity monitor.

The plant's air quality construction permit calls for measuring opacity upstream of the FGD systems. The opacity monitors will be located between the primary particulate control device, the electrostatic precipitator (ESP), and upstream of the FGD. Recent research conducted by the Electric Power Research Institute (EPRI) has shown that wet FGD systems can remove more than 75% of the remaining particulate matter not captured by the ESP. Therefore, because of the amount of particulate matter removed by the FGD from the flue gas stream, the opacity readings recorded by the COMs upstream of the FGD are not representative of the visible emissions being emitted by either unit at the outlet of the FGD.

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XI. POLLUTION LIMITS.

With the exception of those limits identified in Section XII (Operational Flexibility and Variances), the Company commits to abide by all current and future applicable environmental limits. Any provisions of permits or approvals covered by this agreement that are not specifically superseded in Section XII shall remain in effect. The Multi-Emission Cooperative Agreement signed by WDNr and the Company on September 30, 2002 shall also remain unchanged as it applies to Pleasant Prairie Power Plant.

Comment [s13]: Section XI is modified to clarify that this Agreement does not alter or supersede the MECA.

XII. OPERATIONAL FLEXIBILITY AND VARIANCES.**A. Alternative Monitoring and Enhanced Corrective Action**

Comment [s14]: Permit numbers updated. Also: NEW FLEXIBILITY ADDED - The new entry in this subsection, for deicing line flow readings, serves to clarify that DNR does not expect or need the Company to make precise measurements of flow at this outfall.

The agreement allows the Company to use alternative monitoring in exchange for enhanced corrective action with respect to the following items:

Item	Previous Requirements Superseded by this Agreement <i>[source of requirement]</i>	New Requirements
Electrostatic Precipitator Monitoring and Data Collection	The permittee shall monitor and record the primary voltage, secondary voltage, primary current, secondary current, and sparking rate once every operating shift. <i>[Title V Permit #23006260-P02, Conditions I.A.1.b.(5) and I.A.1.c.(5)]</i>	The Company shall examine the electrostatic precipitator and take any necessary corrective action when: <ol style="list-style-type: none"> 1) the daily average opacity exceeds 10 percent; or, 2) the six-minute average opacity exceeds 17 percent. All corrective action shall be documented in the plant logs. The Company and WDNR shall evaluate and potentially adjust these levels after the first year of the agreement.
Annual Instrument Calibration	All instruments used for measuring source or air pollution control equipment operational variables shall be calibrated yearly or at a frequency based on good engineering practice as established by operational history, whichever is more frequent. <i>[Title V Permit #23006260-P02, Condition II.C.13.]</i>	The Company shall calibrate all instruments used for measuring source or air pollution control equipment operational variables during major maintenance outages or following good engineering practices, but no less frequently than once every twenty-four (24) months. The Company shall keep records documenting any calibration activities. Requirements for calibrating continuous emission monitors, <u>particulate monitors</u> , <u>mercury monitors</u> and continuous opacity monitors are <u>not</u> superseded by this agreement.
Coal and Ash Dust Collector Data Collection	<p>The permittee shall monitor and record the pressure drop across the storage bin vent baghouse (C13), in inches of water, once per shift when the process is in operation. <i>[Title V Permit #23006260-P02, Condition I.D.1.c.(2)]</i></p> <p>The permittee shall keep records of the date of any inspections of baghouse C13 and the date any bags are replaced. <i>[Title V Permit #23006260-P02, Condition I.D.1.c.(3)]</i></p> <p>The permittee shall keep records of the date of any inspections of the</p>	<p>The Company shall:</p> <ol style="list-style-type: none"> 1) inspect the storage bin vent baghouse (C13), the in-plant coal transfer operations baghouse (C14), and the coal crusher house baghouse (C16) daily; and, 2) keep records of any necessary corrective actions taken as a result of the inspections of baghouse C13, C14, or C16 or control room alarms.

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Item	Previous Requirements Superseded by this Agreement [source of requirement]	New Requirements
	in-plant coal transfer baghouse (C14) or the coal crusher house baghouse (C16) and a description of any maintenance or repairs performed as a result of the inspection and alarms. [Title V Permit #23006260-P02, Conditions I.E.1.c.(2)(b) and (c) and I.F.1.c.(2)(b) and (c)]	
Fugitive Dust Monitoring Recordkeeping	The permittee shall maintain records that describe the precautions taken to prevent particulate matter from becoming airborne and the dates on which the precautions were taken. [Title V Permit #23006260-P02, Condition I.C.1.c.(1)]	The Company shall conduct shift and routine operational inspections of the coal pile and other fugitive dust sources, ensuring that good operating practices and enhanced dust control techniques are practiced.
Deicing Line Flow Readings for Outfall 002	<u>The permittee shall record the flow of deicing line at the lakeside intake structure when the deicing line is utilized. [WPDES Permit #WI-0043583-06-0, Section 2.2.2]</u>	<u>The permittee shall report the flow of the deicing line at the lakeside intake structure when the deicing line is utilized. The permittee may use a single representative flow value that is typical of an average day to estimate actual flow values on any day the line is used.</u>

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B. Reduced Reporting and Decreased Administrative Expense

The agreement allows the Company to reduce reporting and realize reduced administrative expenses both for itself and the regulatory agencies through implementation of the following items:

Item	Previous Requirements Superseded by this Agreement [source of requirement]	New Requirements
Quarterly Excess Emission Reporting	Quarterly excess emission reports for visible emissions, sulfur dioxide, and nitrogen oxides from boilers B20 and B21 shall be submitted within 30 days following the end of each calendar quarter. [Title V Permit #23006260-P02, Conditions I.A.2.c.(3), I.A.3.c.(3), I.A.4.c.(3), and I.G.1.a.(1) and (2)]	The Company shall: <ol style="list-style-type: none"> 1) notify WDNR by telephone within one business day of excess emissions, as defined in s. NR 439.09(10)(b), Wis. Adm. Code, followed by an electronic mail notification within five business days; and, 2) submit to WDNR semi-annual excess emission reports for visible emissions, sulfur dioxide, and nitrogen oxides from

Comment [s15]: In this subsection, permit numbers are updated and:

- 1) CHANGE IN FLEXIBILITY - Minor changes have been made to the first two rows to remove confusion and to eliminate inconsistencies between this Agreement and the other DNR/We Energies Agreement, MECA, that also covers Pleasant Prairie Power Plant.
- 2) FLEXIBILITY REMOVED - A provision in the original Agreement allowing annual water monitoring reports in lieu of monthly reports has been deleted from this version. The annual reporting option was intended to save time and effort but ultimately did not.
- 3) FLEXIBILITY REMOVED - The original Agreement also included provisions related to the site's stormwater permit. Due to changes in DNR rules, those provisions are no longer relevant to this Agreement and have been deleted.

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Item	Previous Requirements Superseded by this Agreement [source of requirement]	New Requirements
		boilers B20 and B21. These reports shall cover the time periods January 1 to June 30 and July 1 to December 31 of each year and shall be submitted within <u>45</u> days after the end of each reporting period. These reports may be submitted by electronic mail <u>as a .pdf file</u> at the Company's discretion.
Title V Semi-Annual and Annual Monitoring Reports and Compliance Certifications	<ol style="list-style-type: none"> 1) The permittee shall submit the results of monitoring, or a summary of monitoring results, required by this permit to the Department every 6 months. 2) The time periods to be addressed by the submittal are January 1 to June 30 and July 1 to December 31. 3) The report shall be submitted to Southeast Region within 30 days after the end of each reporting period. 4) All deviations from, and violations of, applicable requirements shall be clearly identified in the submittal. 5) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report. <p>[Title V Permit #23006260-P02, Conditions I.G.4.b.a.(1) - (5)]</p> <p><u>Compliance certifications shall be submitted within 30 days after the end of each reporting period.</u> [Title V Permit #23006260-P02, Condition I.G.4.b.b.(3)]</p>	<p>The Company shall submit to WDNR:</p> <ol style="list-style-type: none"> 1) A written semi-annual monitoring report covering the time period January 1 to June 30 of each year within 45 days after the end of each reporting period. This report may be submitted by electronic mail <u>as a .pdf file</u> at the Company's discretion. This report shall be certified by a responsible official of the Company and shall describe any deviations from or violations of applicable requirements, including the dates of each event. 2) A written annual monitoring report <u>within 45 days after the end of each reporting period</u> that meets the requirements specified in conditions I.G.4.b.a.(3), (4), and (5) of the current Title V permit. This report shall include the results of all monitoring, or a summary of all monitoring results, required by the Title V permit. 3) <u>Compliance certifications meeting all the requirements specified in the Title V permit, except that the Company may submit the certifications within 45 days after the end of each reporting period.</u>
Wastewater Noncompliance Notification	A written report describing any reported noncompliance shall be submitted to the Department's regional office within 5 days after the permittee becoming aware of the noncompliance. [WPDES Permit #WI-0043583- 06 , Section	The Company shall take immediate corrective action to address any upset condition or exceedance and shall notify WDNR within 24 hours of becoming aware of a wastewater exceedance. A report describing any reported noncompliance shall be submitted <u>by electronic mail</u> to the

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Item	Previous Requirements Superseded by this Agreement <i>[source of requirement]</i>	New Requirements
	D.(9)(b)]	Department's regional office within 5 days after the permittee becoming aware of the noncompliance. The Company shall keep a signed copy of the electronic mail notification and make it available to WDNR on request.
Annual Evaluation	No existing requirements are superseded.	The Company may evaluate all environmental monitoring, documentation and reporting requirements on an annual basis and submit any suggested changes to WDNR. If the suggested changes are not currently allowed under this agreement, WDNR shall review and consider such changes as potential amendments to this agreement.

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... [5]

C. Permit Streamlining

The agreement allows the Company to streamline the permitting and approval process as follows in order to allow faster realization of environmental and energy efficiency improvements at the Pleasant Prairie Power Plant:

Item	Standard Requirements Replaced by this Agreement	New Requirements
Renewal of the Air Quality Renewable Operating Permit	This Agreement does not replace any Standard requirements. It merely establishes a mutually agreed schedule for renewal of the Company's operating permit.	<p>The Company has already submitted a timely application for renewal of its operating permit. The Company may continue to operate within the requirements of the existing Title V permit (Permit No. 230006260-P02) under the savings clause in s. 227.51(2), Wis. Stats., until one or more of the following two events occur, at which time the permit shall be renewed, incorporating the necessary changes required by the specific event below.</p> <ol style="list-style-type: none"> The proposed U.S. Environmental Protection Agency consent decree (announced April 29, 2003) for Wisconsin Electric Power Company is entered by the court. Those items of the consent decree specific to the Title V permit for Pleasant Prairie Power Plant shall be entered into a renewed permit. When the consent

Comment [s16]: This subsection has been modified as follows:

- 1) NEW FLEXIBILITY ADDED - Language has been inserted to establish mutually agreed and clear expectations regarding the schedule for renewal of the Title V air pollution control operation permit.
- 2) CHANGE IN FLEXIBILITY - The construction permit exemption language has been changed to correct an error in the original Agreement regarding nitrogen oxide thresholds, and to clarify that changes which trigger federal hazardous air pollutant permit requirements are not exempt. The new, corrected version is more restrictive than the original Agreement. The new language also removes a notification procedure which is no longer considered necessary by DNR. These changes collectively serve to remove inconsistencies between the original Agreement and the MECA, which also covers Pleasant Prairie Power Plant.
- 3) FLEXIBILITY REMOVED - Provisions in the original Agreement related to Compliance Assurance Monitoring have been deleted, as these are now included in the Company's air permit and need not be duplicated here.
- 4) NEW FLEXIBILITY ADDED - Language has been inserted to create an expedited process by which the Company may seek concurrence from DNR that a change to its wastewater facilities is not a reviewable project subject to permitting.
- 5) NEW FLEXIBILITY ADDED - Language has been added that enables the Company to make changes to its use of water treatment additives provided that the Company determines, using DNR guidance, that the changes meet DNR criteria for approval.

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Item	Standard Requirements Replaced by this Agreement	New Requirements
		<p><u>decree is entered by the court, the Company shall provide written notice to the Department's Air Quality Compliance Engineer in the Sturtevant Office that oversees the Pleasant Prairie Power Plant.</u></p> <p>2. <u>The construction activities approved by the air quality construction permit approved on April 5, 2004 (Permit No. 03-RSG-296) are completed, or are in such a phase of construction that compliance with the construction permit is assured.</u></p> <p><u>If the consent decree is entered by the court after June 1, 2006, the renewed Title V renewable operating permit may incorporate both the changes necessitated by the consent decree and the April 2004 construction permit, in addition to any changes contained in the Company's 2002 renewal application and this Environmental Cooperative Agreement.</u></p>
Construction Permit Exemption for <u>Minor</u> Physical or Operational Changes	NR 406 Construction Permit Requirements and Application Procedures for Minor Sources/Minor Modifications	<p>A. <u>General Construction Permit Exemption</u> The Company may construct, reconstruct, replace, relocate, or modify a stationary source at the Pleasant Prairie Power Plant <u>without</u> obtaining a construction permit, if the individual project meets <u>all</u> of the following conditions:</p> <p>1) The change is not subject to the permitting requirements of chs. NR 405 or 408, Wis. Adm. Code <u>or subject to sections 112(g) or 112(j) of the Clean Air Act</u>;</p> <p>2) Maximum theoretical emissions from the project do not exceed <u>any</u> of the following thresholds:</p> <p>a. 9.0 pounds per hour each for sulfur dioxide <u>or carbon monoxide</u>;</p> <p>b. 5.7 pounds per hour each for particulate matter, <u>nitrogen oxides</u>, or volatile organic compounds;</p> <p>c. 3.4 pounds per hour for PM₁₀;</p> <p>d. 0.13 pounds per hour for lead; or,</p>

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Item	Standard Requirements Replaced by this Agreement	New Requirements
		<p>e. The emission rates contained in any table in s. NR 445.04, Wis. Adm. Code, for any air contaminant and the respective stack height.</p> <p>3) The change will not cause or contribute to a violation of any standard, emission limit, or control requirements embodied in federal law, federal regulations, chs. NR 400-499, Wis. Stats., or any permit issued to the Company;</p> <p>4) The change is not part of a larger project which, taken as a whole, would not qualify for this exemption; and,</p> <p>5) The Notification Procedure and Documentation Requirements below are satisfied.</p> <p>B. Other Construction Permit Exemptions In addition to any General Construction Permit Exemptions, the Company is not required to obtain a construction permit for changes already exempted or excluded under ch. NR 406, Wis. Adm. Code.</p> <p>C. Documentation Requirements For each change made under the General Construction Permit Exemption provisions, the Company shall maintain documentation of all appropriate technology reviews and analyses, and design information. This information shall be made available to WDNR on request. Also, the Company shall summarize all such changes in its annual report to interested persons.</p>
Operation Permit Revisions	This agreement modifies the application and issuance procedures for NR 407 operation permit revisions.	<p>WDNR shall review any information submitted by the Company under the General Construction Permit Exemption terms of this agreement and determine if the proposed changes require revisions to the Company's operation permit. If revisions to the operation permit are required:</p> <p>1) WDNR shall notify the Company within 15 days of the need to revise the permit;</p> <p>2) The Company may not <u>operate</u> the new or modified source until the revised operation permit has been issued;</p>

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In the event the Company is granted a revised applicability test for New Source Review and/or Prevention of Significant Deterioration rules within a Project XL agreement with EPA and WDNR, the requirements for a General Construction Permit Exemption shall not limit the right of the Company to make operational or physical changes at Pleasant Prairie Power Plant.¶

¶
<#>Notification Procedure¶

The Company shall notify WDNR and EPA each time it intends to exercise the General Construction Permit Exemption portion of this agreement. To do so, the Company shall submit a written pre-construction notification to WDNR and EPA including the following information, at a minimum:¶

- ¶
- <#>A description of the proposed changes, including the purpose and schedule.¶
 - <#>A summary of the expected effect of the changes on potential and actual air emissions.¶
 - <#>A summary of ambient air quality modeling results for the proposed changes.¶
 - <#>A certification by a responsible official of the Company that the changes will not cause or contribute to a violation of any standard, emission limit, or control requirement embodied in federal law, federal regulations, chs. NR 400-499, Wis. Stats., or in any permit issued to the Company; and.¶
 - <#>An explanation of how WDNR may obtain more detailed documentation of all appropriate technology reviews and analyses, and design information, if necessary.¶

¶

Notifications shall be mailed to WDNR Air Management Construction Permit Team Leader (AM/7) at P.O. Box 7921, Madison, WI 53707-7921, and to Chief of Permits and Grants Section MI/MN/WI (mailcode AR-18J), EPA Region V, 77 W. Jackson Blvd., Chicago, IL 60604.¶

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Item	Standard Requirements Replaced by this Agreement	New Requirements
		<ol style="list-style-type: none"> 3) The information submitted by the Company under the General Construction Permit Exemption shall serve as an application for an operation permit revision; 4) Following normal rules and procedures defined in ch. NR 407, Wis. Adm. Code, WDNR shall review the application and propose revisions to the operation permit within 60 days of receiving a complete application; and, 5) EPA review of the proposed revisions to the operation permit shall be limited to 30 days and shall be <u>concurrent</u> with WDNR's normal 30-day public comment period. EPA may extend the review period an additional 15 days if necessary to resolve concerns with the proposed changes. Details of this EPA review will be contained in a separate agreement between WDNR and EPA.
Testing or Research of New Technologies	<p>Equipment used or to be used for the purpose of testing or research may be eligible for an exemption from construction permit requirements in ch. NR 406, Wis. Adm. Code, provided both of the following conditions are met:</p> <ol style="list-style-type: none"> 1) The Company submits a complete application for exemption that describes the proposed testing or research and includes an operating schedule and the types and quantities of emissions anticipated. 2) WDNR determines that the equipment to be used and the anticipated emissions from the testing or research will not present a significant hazard to public health, safety, or welfare or to the environment. <p>WDNR shall approve or deny an</p>	<p>The Company may conduct testing or research of new technologies without obtaining a <u>minor</u> source construction exemption under ch. NR 406, Wis. Adm. Code, if all of the following conditions are met:</p> <ol style="list-style-type: none"> 1) The Company (or its consultants) conducts a thorough engineering analysis and determines that the equipment to be used and the anticipated emissions from the testing or research will not present a significant hazard to public health, safety, or welfare or to the environment; 2) The Company provides written notification to WDNR at least 30 days prior to commencing research or testing that describes the proposed testing or research and includes an operating schedule and the types and quantities of emissions anticipated; 3) WDNR does not object in writing within 21 days of receiving notification; 4) Members of the interested persons group are informed and given at least 7 days to comment; and,

Item	Standard Requirements Replaced by this Agreement	New Requirements
	application in writing within 45 days of receiving a complete application for exemption.	<p>5) The Company responds in writing to any significant comments received from a member of the interested persons group prior to commencing research or testing.</p> <p>The Company shall remain responsible for the performance of any new technologies and for compliance with all applicable emission limits and control requirements, including those in the Title V permit. In addition, the Company shall maintain documentation of all appropriate technology reviews and analyses, design, construction, and operational information, making it available for examination by WDNR upon request. The Company shall describe the environmental and energy efficiency benefits of any technology tested or researched in its annual report to WDNR.</p>
<u>Clarification of Reviewable Projects Under Chapter NR 108, Wis. Adm. Code</u>	<u>This Agreement does not replace any of the standard requirements for reviewable projects under Chapter NR 108. Instead it provides clarification of when changes to wastewater facilities at the site are not "reviewable projects" for the purposes of Chapter NR 108. It also provides a streamlined process by which the Company may seek concurrence from WDNR that a change is not a reviewable project.</u>	<p>A. <u>Non-Reviewable Projects</u> <u>The Company may make minor changes to wastewater facilities at the Pleasant Prairie Power Plant without submitting and obtaining approval of plans and specifications 90 days in advance, if the change meets all of the following conditions:</u></p> <ol style="list-style-type: none"> 1) <u>The change involves making modifications to an existing wastewater facility for which plans and specifications were previously approved by WDNR;</u> 2) <u>The change will not cause or contribute to a violation of any standard or effluent limit embodied in federal law, federal regulations, state regulations, or any permit issued to the Company;</u> 3) <u>The change is not part of a larger project which, taken as a whole, would be a reviewable project under ch. NR 108, Wis. Adm. Code; and,</u> 4) <u>The Notification Procedure and Documentation Requirements below are satisfied.</u> <p>B. <u>Notification Procedure</u> <u>The Company shall notify WDNR each time</u></p>

Deleted: Compliance Assurance Monitoring¶

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Item	Standard Requirements Replaced by this Agreement	New Requirements
		<p><u>it intends to exercise the Non-Reviewable Projects portion of this agreement. To do so, the Company shall submit at least ten business days in advance a written pre-construction notification to WDNR including the following information, at a minimum:</u></p> <ol style="list-style-type: none"> 1) <u>A description of the proposed changes, including the purpose and schedule;</u> 2) <u>A summary of the expected effect of the changes on wastewater effluent from the facility; and</u> 3) <u>An explanation of how WDNR may obtain more detailed design information, if necessary.</u> <p><u>Notifications shall be mailed to the Section Chief, Wastewater and Pretreatment Permits (WT/2), Wisconsin DNR, P.O. Box 7921, Madison, WI 53707-7921.</u></p> <p><u>Should WDNR determine that the information submitted does not meet the requirements listed above, WDNR shall inform the Company that the NR 108 process applies. WDNR shall communicate this to the company via electronic mail within ten business days of receiving the notification from the Company.</u></p> <p><u>C. Documentation Requirements</u> <u>For each change made under the Non-Reviewable Projects provisions, the Company shall maintain documentation of all appropriate technology reviews and analyses, and design information. This information shall be made available to WDNR on request. Also, the Company shall summarize all such changes in its annual report to interested persons.</u></p>
<u>Water Treatment Additives</u>	<u>In the event the Company wishes to commence use of a water treatment additive, or increase the usage of additives greater than indicated in the permit application, the permittee must get written approval from the WDNR prior to</u>	<u>In the event the Company wishes to commence use of a water treatment additive, or increase the usage of additives greater than indicated in the WPDES permit application, without obtaining written WDNR approval, the Company must:</u>

Item	Standard Requirements Replaced by this Agreement	New Requirements
	<u>initiating such permit changes. [WPDES Permit #WI-0043583-06-0, Section 5.3.6]</u>	<ol style="list-style-type: none"> 1) <u>Review WDNR's final written guidance on water treatment additives;</u> 2) <u>Determine prior to initiating any change that the change satisfies WDNR's criteria for approval; and,</u> 3) <u>Document the basis of this decision.</u> <p><u>The Company should consult with WDNR if there is any question on whether an additive meets the criteria for approval.</u></p> <p><u>The Company shall submit summary information to WDNR on water treatment additives prior to any such changes. If the self-approval option is utilized, the letter submitting the additive information shall contain a certification that the Company followed WDNR's guidance for approving water treatment additives and determined that the change meets all the criteria for approval.</u></p> <p><u>The Company shall maintain records in the corporate office and on-site documenting the basis for any self-approved changes.</u></p> <p><u>Any changes to water treatment additives shall be incorporated into the next scheduled renewal of the plant's WPDES permit.</u></p>

D. Coal Combustion Waste Materials Utilization

This agreement allows the Company to recover and beneficially use stored coal combustion waste materials, consisting of coal-fired power plant bottom ash and fly ash, power plant wastewater treatment sludge, and other minor coal-plant related materials. Recovery of such materials would normally require a plan modification consistent with ch. NR 514, Wis. Adm. Code, for each landfill covered under the agreement. Beneficial use of the recovered materials would normally be allowed under ch. NR 538, Wis. Adm. Code, if the materials meet specified criteria. Ch. NR 538, Wis. Adm. Code, is intended to be a self-implementing program but often requires project-specific review and approval from WDNR. Finally, under existing regulations in ch. NR 406, Wis. Adm. Code, the Company could be allowed to burn a coal and coal ash mixture as an alternate fuel without obtaining a new source permit upon approval by WDNR.

The table below summarizes all requirements that the Company shall meet in lieu of ch. NR 514 plan modification approvals, ch. NR 538 beneficial use approvals, and ch. NR 406 alternate fuel approvals. Any other potentially applicable requirements associated with coal combustion material utilization (for example, air pollution emission limits and control requirements, or stormwater pollution prevention requirements) are not waived.

Comment [s17]: This subsection includes four types of changes from the original Agreement:

- 1) CLARIFICATION - Here, and throughout the modified agreement, the word "reuse" has been changed to "use" to be consistent with terminology in ch. NR 538.
- 2) NEW FLEXIBILITY ADDED - Language in several places has been modified to reflect the expanded approval for ash recovery described in Section VI.
- 3) CLARIFICATION - Language has been modified to carefully distinguish that only material recovered from licensed landfills should be used as a sand/gravel substitute.
- 4) CHANGE IN FLEXIBILITY - The emission limit for arsenic has been tightened due to changes in DNR regulations since the original Agreement was signed. Detailed language concerning the method for demonstrating compliance with this limit has been removed from the Agreement, as DNR considers it unnecessarily prescriptive based on 5 years of practical experience with very low actual emissions of arsenic.

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Item	Standard Requirements Replaced by this Agreement	New Requirements
Recovery of Stored Coal Combustion Materials	NR 514 Plan Modification Requirements	<p>1) The Company may recover <u>and receive coal and</u> coal combustion materials for beneficial use, in accordance with the Generic Plan included as Attachment 1 to this agreement and the conditions below.</p> <p>2) The Company shall continue to comply with all conditions of existing landfill plan approvals that are not replaced by the Generic Plan. The Company shall also comply with applicable fugitive dust and stormwater regulations when recovering materials.</p> <p>3) The Company shall notify WDNR prior to initiating materials recovery at any landfill covered under this agreement <u>or receipt of coal and coal combustion materials from other licensed or unlicensed sites.</u> The notification shall describe any proposed site-specific enhancements or alterations to the Generic Plan that address special conditions encountered at that landfill, as well as the expected schedule for all recovery activities at that location. Notification and the meeting described in requirement 4 below are <u>not</u> necessary for any site where recovery of materials is already allowed under an active investigation or remedial action plan approved by WDNR.</p> <p>4) <u>Where the Company or its agents are recovering materials, the</u> WDNR shall meet with the Company and the contractor at the landfill site within 45 days of receiving the notification described above. The adequacy of the Generic Plan and any enhancements or alterations proposed by the Company shall be discussed, considering actual site conditions. WDNR shall clearly identify any recommended refinements to the course of action proposed by the Company. WDNR shall subsequently</p>

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Item	Standard Requirements Replaced by this Agreement	New Requirements
		<p>document the results of the meeting.</p> <p>5) The Company shall audit the environmental management system of any business contracted to recover stored combustion materials from any landfill covered under this agreement prior to the commencement of recovery.</p> <p>6) For each landfill, the Company shall submit a formal NR 500 plan or plan modification no less than 180 days prior to completing materials recovery. The plan modification shall address closure, monitoring, and ultimate fate of the property.</p>
Beneficial Use of Stored Coal Combustion Materials as Sand/Gravel Substitutes	NR 538 Beneficial Use Approvals	<p>The Company may crush and screen coal combustion materials recovered from <u>licensed</u> Company landfills under the terms of this agreement. The Company shall comply with WDNR fugitive dust rules and stormwater rules when crushing, screening, or transporting these materials. Any use of these materials shall comply with ch. NR 538, Wis. Adm. Code, unless the use is specified in that rule as exempt.</p>
Use of Recovered Coal Combustion Materials in Alternate Fuels at Pleasant Prairie Power Plant	NR 406 Alternate Fuel Approvals (to avoid permit modification) and NR 445 Hazardous Pollutants.	<p>The Company may blend coal combustion materials recovered from Company landfills, <u>other power plants the Company operates, and other coal combustion ash sources received from third parties</u> under the terms of this agreement with pulverized coal. The Company may burn the mixture as an alternate fuel in Boiler B20 or Boiler B21 at Pleasant Prairie Power Plant without modifying this agreement or any existing permits, if no physical changes are made to the combustion units. <u>All applicable emission limits and control requirements for those boilers are unchanged and shall continue to apply.</u> The Company shall list all alternate fuels when applying for renewal of the operation permit for Pleasant Prairie Power Plant.</p> <p>To ensure compliance with ch. NR 445, Wis.</p>

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Item	Standard Requirements Replaced by this Agreement	New Requirements
		Adm. Code, emissions of arsenic <u>attributable to the use of recovered materials as fuel</u> may not exceed <u>14</u> pounds over any 12-month period. <u>The Company shall continue to sample materials brought to the plant to maintain compliance with this limit and to ensure the pollution control equipment continues to function properly.</u>
Beneficial <u>Use</u> of New Combustion Byproducts from Pleasant Prairie Power Plant	N/A: The existing NR 538 approvals for <u>using</u> Pleasant Prairie Power Plant ash are unchanged.	The Company may continue to beneficially <u>use</u> fly ash and bottom ash created by combustion processes at Pleasant Prairie Power Plant, pursuant to the terms of existing ch. NR 538 approvals.

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<#>As indicated in Attachment 1, the Company shall analyze samples of recovered materials and determine the average monthly concentration of arsenic on a composite basis. ¶

¶ The Company shall calculate monthly arsenic emissions using

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¶ (average monthly concentration) * (monthly amount of recovered materials burned) * (1 – average particulate

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¶ Each month, the Company shall sum the emissions from the preceding 12 months and keep records demonstrating that the calculated total is less than 25 pounds

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Comment [s18]: Section XIII has been simplified because the Baseline evaluation was finished years ago and is no longer relevant.

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Comment [s19]: Section XIV has been completely rewritten. To begin with, the baseline evaluation was completed long ago and no longer needs to be referenced. More importantly, the original Agreement included language that both parties ultimately found confusing. In addition, the original Agreement was unnecessarily detailed and prescriptive, and the commitments made by the Company went far beyond statutory requirements and the commitment ... [6]

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The Company shall provide an at(... [10]

XIII. REPORTING OF VIOLATIONS.

Any violations discovered as part of a performance evaluation shall be disclosed to WDNR within 45 days of the completion of the evaluation in a report containing the information required under s. 299.80(12), Wis. Stats. WDNR may not take any civil enforcement action on any such reported violations if they are corrected within 90 days of notification, unless the violations present an imminent threat to public health or the environment or may cause serious harm to public health or the environment, or the department discovers the violations before the Company discloses them. This does not exempt the Company from the requirements for immediate notification contained in s. 292.11, Wis. Stats. Any criminal violations would always be subject to WDNR enforcement action.

If a longer period of time is needed to correct the violations, a compliance schedule can be negotiated and the agreement modified allowing a compliance schedule of up to 12 months.

XIV. PERIODIC PERFORMANCE EVALUATIONS.

The Company shall annually evaluate the overall environmental performance of the Pleasant Prairie Power Plant. Each evaluation shall include:

- a quantitative summary of air emissions, waste generation, and wastewater discharges;
- an assessment of the performance of the EMS;
- a review of progress and results on the goals and commitments established in this Agreement; and,
- a review of conformance with the terms of this Agreement.

In addition, both parties to this Agreement shall annually assess the success of the Agreement in reducing the time and money spent on paperwork and other administrative activities that do not directly benefit the environment.

On or before April 1 of each year, the Company shall summarize all of the above findings in an Annual Performance Report. The specific and detailed content of each report will be discussed at meetings of the multi-discipline regulatory and compliance assistance team described in Section VII of this Agreement. The Company shall submit each report in .pdf format to the DNR Project Manager and to each member of the Interested Persons Group established under Section VIII of this Agreement. If there were any changes to the membership of the Interested Persons Group in the preceding year, the Company shall report this to the DNR Project Manager as well. Each report shall be made available on the Internet by WDNR or the Company, or both.

In addition to the overall environmental performance evaluations, the Company shall separately evaluate its compliance with approvals that are not replaced by this Agreement and the provision of chapters 280 to 295 Wis. Stats. and rules promulgated under those chapters for which a variance is not granted by this Agreement. A compliance evaluation shall be completed in each calendar year. The schedule and specific scope for each compliance evaluation shall be discussed at meetings of the multi-discipline regulatory and compliance assistance team described in Section VII of this Agreement. In general, the Company may exercise discretion in choosing which approvals and provisions to evaluate in any given year. However, over the full term of this Agreement, the Company shall evaluate all relevant approvals and provisions at least once. Furthermore, every annual compliance evaluation shall include a review of compliance with all requirements for which the previous year's evaluation found non-compliance. The Company shall submit the results of each compliance evaluation to the WDNR Project Manager within 45 days of the completion of the evaluation in a report containing the information required under s. 299.80(12), Wis. Stats.

XV. REOPENER. At any time during the period of the agreement the Company may request to reopen the agreement for potential modifications to reflect changing business conditions, environmental performance goals, modification or inclusions of other provisions, or for other valid reasons as mutually agreed with WDNR. Any modifications to the agreement shall require the same approvals as did the original agreement.

XVI. APPLICABLE LAW. The laws of the State of Wisconsin shall govern this agreement. Except as provided herein, the Company shall at all times comply with all Federal, State, and Local laws, ordinances and regulations in effect during the period of this agreement.

XVII. ADDRESSES. All correspondence and communication of relevance to this agreement shall be directed to the appropriate contact person listed below. Changes in the information listed below shall be forwarded to the other party when effective and shall become part of this agreement without a formal amendment.

Comment [s20]: Section XVII changes were made to add more useful contact information and to acknowledge that the listed individuals are contacts only for matters related to this Agreement.

John Shenot
Wisconsin Department of Natural Resources
Bureau of Cooperative Environmental Assistance
PO Box 7921
Madison, WI 53707-7921

Brian Borofka
Wisconsin Electric Power Company dba We Energies
333 W. Everett Street

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8000 95th

~~11/28/2005~~ [DRAFT Version](#)

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[Milwaukee, WI 53201](#)

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Solid Waste Permit (Ash Landfill)	Pleasant Prairie Ash Landfill WDNR Site License No. 02786 8000 95 th Street Pleasant Prairie, WI 53158
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Interested persons that the Company either has worked with or will be requesting to work with include representatives of the groups listed below. The individuals representing these groups may change over time without necessitating an amendment to this Agreement. The Company shall simply maintain a current list of individual participants. The Company shall also update WDNR annually on any changes to the list of participants in the written performance reports described in Section XIV of this Agreement.

Pleasant Prairie Power Plant management staff
 Local 2150 IBEW (plant represented staff)
 Local 317 Operating Engineers (plant represented staff)
 Village of Pleasant Prairie
 Pleasant Prairie Planning Commission
 Kenosha County
 Office of the County Executive
 Kenosha County Board of Supervisors
 Environmental Health Office
 Wisconsin Department of Natural Resources
 Sturtevant Service Center
 Milwaukee Regional Office
 Kenosha Chamber of Commerce
 Kenosha Area Development Corporation
 Local Emergency Planning Committee (LEPC)
 Kenosha News (local newspaper)
 Wisconsin Environmental Initiative
 Anthony Earl (former Governor)
 Indian Trails School (local school)
 Lakeshore Technical School (local school)
 Local companies (e.g., Rust Oleum, Lawter, SuperValu)
 Local officials from the vicinity of each landfill from which ash is actually recovered under the terms of this agreement

Assistance available from the Company to interested persons shall include but not be limited to the following:

Section X includes multiple changes to the commitments made in the original Agreement. Some of the original commitments were fully achieved in the first 5-year term, so they have been deleted from this version. Other commitments have been slightly modified to be consistent with other changes in this version. Most importantly, the final 3 rows in this table describe new commitments made by the Company.

Annual Discharge Monitoring Reports	Monitoring results obtained during the previous month shall be summarized and reported on a	The Company shall report discharge monitoring results to WDNR as currently required under their WPDES permit, or, at
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	<p>WPDES Discharge Monitoring Report (DMR), #3200-28, postmarked no later than the 28th day of the month following the completed reporting period. [WPDES Permit #WI-0043583-5, Section D.(1)]</p>	<p>the Company's discretion, in an annual report as described below.</p> <p>Annual Report Option: Monitoring results obtained during the previous calendar year shall be summarized and reported by the Company, postmarked no later than January 28 of the year following the reporting period. The annual report shall include the following information for each calendar month:</p> <p style="padding-left: 40px;">The highest recorded value for each parameter monitored; The lowest recorded value for each parameter monitored; The monthly mean value for each parameter monitored; The total pounds discharged for each parameter subject to a fee; and, A list of any exceedances of permit limits and the resulting corrective actions taken.</p> <p>This change in reporting frequency does not in any way modify the existing monitoring or recordkeeping requirements. The annual report shall also include any other information related to discharge monitoring data required in the WPDES permit.</p>
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Wisconsin DNR

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Stormwater Permit Classification	<p>The Company holds a "Tier 2" general permit regulating storm water associated with industrial activity. [WPDES Permit #WI-S067857-1]</p>	<p>The Company shall complete form 3400-171, "Self Determination and Certification," and submit the form to WDNR. The Company's existing storm water permit shall then be revoked and replaced by WDNR with a less stringent "Tier 3" general permit within 14 days. All existing Tier 2 permit requirements shall remain in place until the effective date of the Tier 3 permit. Replacement of the Tier 2 permit with a Tier 3 permit recognizes WDNR's determination that the stormwater drainage from plant areas with a potential for significant material exposure is already routed to the plant's wastewater treatment facility.</p>
Electronic Reporting	<p>No existing requirements are superseded.</p>	<p>WDNR shall form an External Advisory Committee to discuss electronic reporting of environmental regulatory data, including but not limited to wastewater discharge</p>

		monitoring data. The Advisory Committee shall strive to identify obstacles, develop solutions to overcome the obstacles, and secure funding to implement the solutions. WDNR shall invite the Company and other regulated entities from Wisconsin to participate in this Advisory Committee. The Advisory Committee shall meet for the first time by March 5, 2001 and shall produce a written report with recommendations no later than August 15, 2001.
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Page 23: [6] Comment [s19]

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Section XIV has been completely rewritten. To begin with, the baseline evaluation was completed long ago and no longer needs to be referenced. More importantly, the original Agreement included language that both parties ultimately found confusing. In addition, the original Agreement was unnecessarily detailed and prescriptive, and the commitments made by the Company went far beyond statutory requirements and the commitments made by most other program participants. This modified version is much more clear and streamlined and flexible, while ensuring that useful information is still reported and all statutory requirements for performance evaluations and reports are met.

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Wisconsin DNR

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Within 180 days of the signed agreement, the Company shall submit to WDNR a baseline performance evaluation covering the plant's environmental performance. This

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Wisconsin DNR

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be repeated annually on the anniversary date of the baseline submittal or on another date mutually agreed to by WDNR and the Company. Results of the performance evaluations shall be shared with the interested persons group.

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Wisconsin DNR

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WDNR shall maintain a record of its own administrative savings and other cost savings associated with the agreement and provide this information to the Company on at least an annual basis.

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Wisconsin DNR

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The Company shall provide an annual written performance report to WDNR, the interested persons group, and the public library nearest to Pleasant Prairie Power Plant that includes the following information:

Regarding the Interested Persons Group:

- Changes in the composition of the interested persons group;
- Summary of assistance and information provided to the interested persons group;
- Summary of meetings with the interested persons group, including dates, attendance lists, topics addressed, and comments received; and,
- Results of any actions or changes resulting from input and feedback from the interested persons group.

Regarding Commitments to Superior Environmental Performance:

Tons of coal displaced by recovered ash and Megawatt-hours (MWh) of energy recovered from previously landfilled ash;
 Average annual opacity of the plant's emissions and summary of any corrective actions taken through the year to address any opacity levels above the agreement commitment level;
 Volume of landfill space made available and number of landfills decommissioned or acres of land made available for higher use;
 Progress on the implementation and revision of the plant's environmental management system (EMS);
 Results of the initial or annual performance review conducted of the plant, including number of findings, corrective actions, and time periods required for corrective action;
 Progress on the implementation and revision of the plant's environmental management information system (EMIS);
 Progress on the conduct of supplier EMS audits, including list of audits performed, any performance improvements by the suppliers and consequent environmental or other benefits;
 Progress and results of mercury emission control research and testing; and,
 Progress and results of continuous particulate matter monitor study.

Regarding Operational Flexibility:

A list of any incidents when the daily average opacity exceeded 10 percent or the six minute average opacity exceeded 17 percent;
 Semi-annual excess emission summaries;
 Semi-annual and annual monitoring reports and compliance certifications;
 Performance measures, including normalized air emissions per megawatt-hour (MWh) energy produced;
 An annual discharge monitoring summary report;
 A list of all wastewater noncompliance notifications;
 A summary of process changes made at the plant under the General Construction Permit Exemption procedures in section XII.C of this agreement;
 Any construction relating to plant emission sources;
 New technologies tested or installed at the plant;
 A summary of environmental benefits and administrative savings to the Company and WDNR resulting from the acceleration of process improvements or technologies allowed under section XII.C. of this agreement, including any accelerated environmental improvements and the consequent reduction in overall emissions or potential impact to the environment;
 An annual summary of coal combustion byproduct utilization;
 Source of materials recovered;
 Weight or volume of materials used;
 Energy value of recovered materials;
 Chemical characteristics (per NR 538 Annual Tests Criteria);
 Weight of new marketable materials produced as a result of the recovery process;
 Calculated weight of virgin sand/gravel aggregates displaced by the recovery and sale of coarse materials (assuming a 1:1 replacement ratio);
 Detailed information for each landfill on the amounts of material removed, an indication of whether removal is completed or ongoing, and an assessment of the removal process; and,

Any progress relating to the environmental benefits or redevelopment of the monofill facilities from which the material is recovered.

Regarding Overall Success of the Agreement:

An itemized summary of estimated administrative cost savings resulting from this agreement both by the Company and WDNR during the previous year; and,
A summary of the annual achievements, difficulties or other challenges associated with fulfilling the agreement.

The annual written progress report should follow the Global Reporting Initiative *Sustainability Reporting Guidelines* published in June 2000.

In addition, the Company shall host an annual summary meeting at the plant wherein WDNR and all interested persons are presented the above information.

The Company shall select the actual annual submittal date of the above information within 60 days after the effective date of this agreement